



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|------------------------------|------------------|
| 10/540,342 | 01/03/2006 | Leander Dietzsch | GK-Zei-3280 / 500343.2030 | 1621 |
| 26418 | 7590 | 05/08/2007 | EXAMINER | |
| REED SMITH, LLP ATTN: PATENT RECORDS DEPARTMENT 599 LEXINGTON AVENUE, 29TH FLOOR NEW YORK, NY 10022-7650 | | | FINEMAN, LEE A | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2872 | |
| | | | MAIL DATE | DELIVERY MODE |
| | | | 05/08/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

TH

Office Action Summary

Application No.

10/540,342

Applicant(s)

DIETZSCH ET AL.

Examiner

Lee Fineman

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1: ☒ Certified copies of the priority documents have been received.
- 2: ☐ Certified copies of the priority documents have been received in Application No. _____.
- 3: ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

This Office Action is in response to an amendment filed 20 February 2007 in which claims 12, 16, and 19 were amended. Claims 12-22 are pending.

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: High Stability Microscope.

2. The disclosure is objected to because of the following informalities: On page 6, section [0033], line 8, "supporting cell 30" should be --supporting cell 36--.

Appropriate correction is required.

Claim Objections

3. Claims 12-22 are objected to because of the following informalities:

Regarding claim 1, the limitation "the supporting cells" lacks antecedent basis and should be --the supporting cell[[s]]--. The dependent claims inherit the deficiencies of the claims from which they depend.

Regarding claim 17, the limitation "wherein the second assembly comprises a stage support, a stage guide, and a stage" is unclear. Are these elements the same as those required in the independent claim or different ones? For the purposes of examination, these elements will be taken to be the same as the ones in the independent claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 12-13, 16-19, and 21-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Rosenberger, US 4,168,881.

Regarding claim 12, Rosenberger teaches a microscope comprising: a base body or a stand (12); a stage support (dashed outlined element under element 18); a guide for adjusting the stage support or an objective changer device with inserted objectives (15); and a stage for holding the object or specimen (18); said microscope further comprising: a supporting cell (14) being provided and being connected to the stand (fig. 2), preferably rigidly (col. 2 line 7) but so as to be exchangeable (col. 2 line 64); and a first assembly being provided for receiving, holding and adjusting the objective (32) and a second assembly being provided for positioning the object or specimen relative to the objective (see lower portion of microscope shown in fig. 2 including elements 15, 18, 20, and 22), said first and second assembly are attached to said supporting cell (fig. 2), wherein the supporting cell is a single structure (14).

Regarding claim 13, Rosenberger further teaches wherein the supporting cell is rigidly fastened to a plurality of projections (16) of the stand.

Regarding claim 16, Rosenberger further teaches wherein the first assembly is designed as an objective changer device (col. 3 lines 12-14) or as an objective focusing device.

Regarding claim 17, Rosenberger further teaches wherein the second assembly comprises a stage support (dashed outlined element under element 18), a stage guide (15), and a stage (18).

Regarding claim 18, Rosenberger further teaches wherein the supporting cell is optimized with respect to rigidity (col. 2 line 7), use of material (col. 2 line 7), dimensioning (col. 2 lines 27-31) and thermal behavior (examiner notes that while Rosenberger does not specifically address thermal behavior, it is understood that the supporting cell is sufficiently optimized with respect to thermal properties to allow ideal operation) while adhering to requirements for high stability and imaging quality of the microscope.

Regarding claim 19, Rosenberger further teaches wherein an objective changer device constructed as an objective turret is arranged at the supporting cell (col. 3 lines 12-14 also see fig. 2).

Regarding claim 21, Rosenberger further teaches wherein the stage guide has a guide plate (20 and 22) that is fixedly arranged at the supporting cell and guide elements at the stage support which are in an operative connection with the guide plate.

Regarding claim 22, Rosenberger further teaches wherein the supporting cell comprises a thermally invariant ceramic material, sintered material or other suitable material (col. 2 line 7 and 26-31) or a combination of such materials. Examiner notes that the heavy and rigid material forming Rosenberger's supporting cell qualifies as a "suitable material" thus meeting the limitation of claim 22.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenberger in view of Kanao et al., US 6,594,075.

Although Rosenberger teaches vibration reduction as well as screws providing attachment between the base and supporting cell, Rosenberger lacks vibration-isolation intermediate layers between the supporting cell and the contact surfaces of the screws of the stand (i.e. projected portions). Kanao teaches a microscope where vibration-isolation is achieved via a vibration absorber material (col. 14 line 48-50, col. 16 lines 7-10, col. 16 lines 63-65, and fig. 13) which provides a springing attachment (examiner notes that rubber provides a spring-like restorative force). At the time of invention, it would have been obvious to one of ordinary skill in the art to modify Rosenberger's projected portions to include the vibration-isolating intermediate layers taught by Kanao. The motivation for doing this would have been to prevent vibration transmission to the optical system and specimen as suggested by Kanao (col. 16 lines 7-10).

8. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenberger in view of Weiss, US 2003/0133190 A1.

Art Unit: 2872

Rosenberger lacks a condenser at the stage support. Weiss teaches a condenser (4) arranged at the stage support (1). At the time of invention, it would have been obvious to one of ordinary skill in the art to modify Rosenberger's stage to include Weiss's condenser. The motivation for doing this would have been to allow illumination to be provided from beneath the sample as suggested by Weiss (paragraph 47).

Response to Arguments

9. Applicant's arguments filed 20 February 2007 have been fully considered but they are not persuasive.

Applicant argues that the pillar (14) of Rosenberger acts as the microscope stand in contrast to the instant invention which has a stand and a supporting cell. The examiner respectfully disagrees. As indicated in the rejection, base (12) of Rosenberger is considered the base body or stand and therefore pillar (14) is the supporting cell. The applicant further argues that Rosenberger fails to teach or suggest that the supporting cell is a single structure. The examiner again respectfully disagrees. Pillar (14) is clearly a single structure which is attached to base (12) and has the stage (18), eyepiece mounting arm (42) and objective mounting arm (24) connected to it (see page 2, line 67-page 3 line 22).

10. It is noted by the Examiner that the claim objections and 112 rejection made in the previous Office Action have been withdrawn due to amendment by the Applicant.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lee Fineman whose telephone number is (571) 272-2313. The examiner can normally be reached on Monday - Friday 7:30 - 5:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on (571) 272-2434. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2872

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


LAF

1 May 2007


MARK A. ROBINSON
PRIMARY EXAMINER